Workplace Innovation in Europe: A Review of the Literature and Findings of Case Studies

Background Document for Lessons Learned
on the Innovative Workplace

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I. Introduction

1. General

This report provides an overview of the major themes in the literature on European workplace innovation and identifies the major findings of selected case studies regarding the nature and impacts of workplace innovations.

Section II. briefly discusses the recent interest in workplace innovation, identifies the benefits of case studies as a methodology, and identifies some of the major themes in the literature. Section III. highlights the finding of the case studies documented in this report. Section IV. draws out the implications for Canada of the European experience. Section V. contains the summaries of some of the more interesting/representative case studies on European workplace innovation. Section VI. is the bibliography.

II. LITERATURE REVIEW

1. GENERAL

Interest in Workplace Innovation

Economic recession and increasing global competition have precipitated much of the current inquiry into how the nature of workplace organization and design affect the productivity of the enterprise. The design of the work process and the organization of the relationships between employees as well as between employees and machines or other equipment are being analyzed to identify ways to optimize output and productivity. Some studies also share a more humanistic interest in the ways in which the workplace organization and design can improve the quality of the working experience - working conditions and standard of living - for employees.

Micro-level analysis of the enterprise is complemented by analysis at the industry, sector or national level which identify patterns of workplace organization and design. Inquiries at both levels can consider how the workplace and workplace patterns are impacted by broader economic, social, political conditions and trends. Included in these factors is a special interest in the systems of industrial relations - collective bargaining, legislation and regulatory policy, etc. - and their impacts on the workplace. The recent work by Kochan and Osterman, The Mutual Gains Enterprise: Forging a Winning Partnership Among Labour, Management, and Government, (1994) offers a visionary argument for workplace reform and innovation in North America based on the pursuit of mutual interests to achieve long-term viability for the economy.

There are many offshoots and trends in inquiry, such as the profound interest, especially in North America, in the so-called "Japanese" style of production, debates regarding the "flexible workplace", studies in the "quality of working life", etc. These have become almost self-contained areas of specialization among academics. What binds them together, however, is that they view the workplace almost as a "neutral tool" to be ordered, changed, modified, etc., to fit and reflect economic, social, political, or other needs.

In sharp contrast to this is the literature which analyzes workplace relations from the point of view of how workers are controlled or otherwise persuaded to work hard and how the relations between management and workers are ordered and maintained. Here workplace relations are understood as a manifestation of the essential defining characteristic of society and economy, i.e., a capitalist system of ownership and production and the subjugation of the worker to the

owner/manager of the enterprise. These studies post a conflictual relationship between workers and owners/managers. Included in this literature are Braverman's Labour and Monopoly Capital (1974) which focuses on the question of how workers and the workplace are ordered to increase output as well as Burawoy (1979) who asks how they are persuaded to cooperate in their own subordination.

Case Study Methodology

This review is focused on literature based on the methodological approach of case study analysis. A few words will be offered to set out the benefits and strengths of case study analysis to the study of workplace practices and organization. Edwards et.al. (1994) argues that the best rational for the case study approach lies in the generalizations that can be made based on the analytical connections between social processes. Relying on Mitchell (1983), he compares this to the generalizations that can be drawn from quantitative analyses, such as survey research, which are based on the statistical representativeness of the study.

Edwards goes on to note that generalizations can be drawn from case studies:

- based on the discovery of hidden forms of behaviour, e.g., sabotage in the workplace;
- through the identification of critical cases which either prove or disprove phenonomon;
- identifying causal mechanisms linking phenomenon and showing how tendencies occur;
- which explain variations; and
- which advance the understanding of the nature and sources of variation in an activity.

Accordingly, this review of the literature based on selected European case study findings will serve to highlight insights into workplace innovation regarding its cause, nature, impacts and critical success factors, with a view to the implications for workplace innovation in Canada.

Case studies by their nature provide in-depth analyses of workplaces and insights based on factors critical during the period of study. However, organizations and their environments continually change. This report reflects a preference for more contemporary case studies, but is not limited to them. The value of a case study is not determined by its currency, but rather by the acuteness and depth of the analysis provided. Accordingly, even case studies reported as recently as 1996 may no longer reflect the situation in 1997.

2. Themes Regarding Workplace Innovation

National Variations

Observers of patterns of changes in workplace organization at the national or sectoral level are often able to point to macro-level structural factors which explain the overall direction of workplace reform. Following are some examples of analyses which identify national- or sectoral-level factors in the adaptation of workplace innovation.

Sweden

Kjelberg's (1992) analysis of the Swedish situation identifies societal-level motives for Swedish employers to change workplace organization: an export-based industry with increased pressure for flexibility and cost-reduction; low unemployment which made recruitment and retention of worker key; and a welfare system which led to problems of sickness absenteeism.

He argues that even within Sweden, regional variations in these factors explain different management strategies towards workplace organization within the same company (especially Volvo). He views the current national situation with employer demands for weakening the role of unions and a relative abandonment of an emphasis on co-operation and agreement through centralized self-regulation in favour of legislation as posing a critical challenge to the Swedish model of cooperative union and management relations.

Italy

Ferner and Hyman (1992) identify the impact of restructuring of the Italian economy in the 1970s on management strategies and industrial relations in the enterprise. Italian employers have followed a strategy of increased flexibility in pay and employment levels. Both employers and unions have been prepared to engage in collaborative/cooperative management of change. Because of Italy's history of poorly institutionalized and conflictual industrial relations, this latter development puzzled the authors.

Their study suggests a number of factors that may explain this new attitude including i) the general weakening of unions in the 1970s which reduced the "threat" of sharing power and predisposed the unions to a more moderate stance vis a vis the company's requirements for flexibility; and ii) the weakening of the Italian state which produced interclass coalitions and a need for a social consensus which ruled out the possibility of a more "Thatcherite" approach to industrial relations.

Ferner and Hyman (1992) also seek to explain the variations within the Italian experience. They identify as possible explanatory factors:

- differences in the market situation of employers, e.g., employers facing critical competitive pressures are more likely to adopt unilateral approaches;
- sectoral variations in industries;
- the extent to which production is diversified and provides opportunity to benefit from participation; and
- the history of unionism, e.g., whether or not there is a union that management feels it could do business with.

The authors find that none of these provide a fully satisfactory explanation on their own for the variations. What they do point out, however, is the potential instability of cooperative managerial approaches, especially as pressures from the European common market, global competition, and internationalization of production continue to rise. This analysis suggests that workplace innovations may be, in fact, quite contingent upon the "right circumstances" existing and very unstable when circumstances change.

Germany

Another example of the importance of "national" factors is Jacobi's (1992) analysis of how the German style of employee participation complements already institutionalized employee representation.

International Comparisons

Another example of the impact of societal practices and values on the nature of workplace-level change is provided in Muller-Jentsch and Sperling's (1995) study of the introduction new information technology (IT) in British, German, and Swedish banks and the degree of employee participation and involvement in the process. The authors argue that optimal utilization of information technology requires a commitment and acceptance by employees. However, the characteristics of the national and local industrial relations systems have a major impact on the ability of management to obtain employee and union commitment. Hence the patterns of negotiation, consultation, and employee involvement regarding the implementation of IT varied significantly between the three countries. Britain, with the least well-developed systems of consultation and low-trust, highly adversarial industrial relations, was in the least favorable position to benefit from the potential competence and motivation of employees.

Convergence Tendencies

In contrast to the literature which focuses on the impact of national differences (industrial relations system, management strategy, etc.) on the introduction of workplace innovation and workplace divergence, are the studies which argue

that the increased need for flexibility by all companies leads to a convergence, albeit with some variations. Functional flexibility includes enlarging production workers' jobs, increased flexibility in working practices, etc. Strategies of numerical flexibility include the use of casual labour, part-time workers, layoffs, etc.

In a case study of nine European engine plants belonging to four different companies, in four countries, Mueller (1991) found that with new technology, new skills have become increasingly important and companies have created and introduced new semi-skilled production jobs. In a move towards functional flexibility, he identified broad common trends including:

- additional responsibilities for production workers;
- reorganization of maintenance and quality control;
- craftsmen flexibility;
- training programs for semi-skilled production operators; and
- status awareness of skilled workers.

The factors identified by Mueller (1991) responsible for convergence included:

- increase in competition;
- faster changing product markets;
- internationalization of production technology, product development and manufacturing operations; and
- pressure to adopt a "Japanese" type of production system.

The European context for workplace innovation cannot be discussed without a reference to developments at the level of the European Community and its attempts to harmonize the national legislation of members and establish international standards. The Charter of Fundamental Social Rights of 1989 was a significant step at the political level to provide for more coordinated collective bargaining as well as information, consultation, and participation rights across the European Community. The globalization of the economic activities of enterprises and emerging new technologies bring other pressures to bear on national, regional and local practices. Notwithstanding these factors, however, significant differences remain at all levels. Accordingly, the manner in which changes are introduced in the workplace and managed can lead to different outcomes.

Clarke and Bamber's (1994) review of the moves towards harmonization, which notes the very different positions adopted by some countries to proposals for harmonization, finds that competitive pressures and political pressures have brought about considerable changes in the national characteristics and practices and the international economic environment remains the primary influence on the industrial relations systems of the various countries. Strong differences still

persist and there remains lots of room for different strategic choices to be made by governments, employers, and unions regarding the course of change.

Another factor that receives a lot of attention is the increasing dominance of multinational corporations in the globalized economy. The increased internationalization of production by multinational corporations (MNCs) has provided opportunities for the establishment of contacts between unions and management within the multinational corporations. A number of attempts at intraorganizational joint contacts began in the 1960s and 1970s.

An example of structural support for such contacts occurred in France where the French Socialist government elected in 1981 had a strong interest in improving employee representation in multinational companies. The "Auroux laws" included a requirement to establish group works councils covering entire groups of undertakings. This seemed to contribute to further MNC-level information exchange between the parties, and was reinforced by the personal interest of some company presidents. Similar processes began to take hold in the other European countries for the sharing of information and consultation between the parties. However, France and Germany, which both have group works council legislation, remain the leaders. It may be that this presents a precondition for intracompany initiatives. (See European Industrial Relations Review (EIRR) 228, January 1993, 13-19 for information on MNC-level employee representation.)

An overall decline in MNC-level contacts which occurred during the 1980s has been attributed to the restructuring, unemployment, and/or disagreements between the parties. It has also been noted that employers feared it might lead to multinational collective bargaining, and national unions were reluctant to transfer power to international bodies. With the economic recession and already significant differences between the countries' industrial relations laws and organizations, the interest declined.

Employee Support of Workplace Innovation

Much of the literature on workplace change covers the issue of whether or not change is accepted and supported or opposed by the employees affected by it. Case studies and theoretical writings address the issues of why and how worker cooperation and support is achieved or otherwise. The study by Daniel and Hogarth (1990) looks at the question of why there appears to be stronger support by workers for technological change as opposed to organizational change based on survey results of British workplaces. Following up on more survey results with case studies of workplaces, they found that the relatively more positive support for technological change was based on the following factors:

- new technology represents progress and advance;

- the benefits of improved equipment are concrete and demonstrable;
- they represent a competitive advantage for the firm;
- it represents confidence in the future, job prospects, and security; and
- its introduction tends to be incremental.

On the other hand, organizational change represented a negative situation to workers - change required because of past mistakes or shortcomings. Further, its chief implications for workers tended to be work intensification and possible job loss without concomitant benefits. Finally, its introduction tended to be discontinuous, creating a sharp break with familiar ways of doing things.

Workplace innovation is also an issue in the establishment of new or "greenfield" site establishments. Beaumont and Hunter (1991) examine how a paper production company, with a business strategy based on quality enhancement, used the selection and recruitment process at a greenfield site in Scotland to staff up with workers who were compatible and had a predisposition towards high levels of motivation, commitment and flexibility.

Hamblin's (1995) case study of the attitudes of secretarial workers in a British company towards the idea of teleworking found that the workers' preferred choice was to work part of the week at home and part in the office. Just over half of the workers in the study indicated that they would prefer a home working arrangement whereby they spent part of their working time at home and part at the employer's office. Less than 40 per cent indicated that they would prefer the current arrangement where all of the work was done at the employer's premises. The perceived benefits of home work in the study included personal freedom, accommodating children in the after-school hours and school holidays, etc.

Stability in Workplace Innovation

Progress and success in workplace innovation in the European context has not always resulted in security for the future of the workplace involved. The most notable example is the closure of the Swedish Volvo factories in Kalmar and Uddevalla which were internationally recognized for innovative work organization and flexible specialization linking production with customer-orientation.

Martin (1995) chronicles the implementation of innovation in work design that began at the Kalmar factory in 1974 with the replacement of the standard assembly line by assembly teams which worked on the vehicles in separated work spaces as they were moved along by a carrier. The next stage in innovation was at the LB truck plant in Tuve in 1982 where the assembly line was 'broken' and work organized on more of a group basis with rotating group leaders and a reduction in supervision. Changes to the pay system included an individual knowledge-based component and a group component.

In 1988 the most significant changes in work design were made at Volvo's Uddevalla plant. Production was organized into small-scale parallel assembly with final assembly carried out entirely by an 8 to 10 person team. Workers received extensive training with the master-builder capable of building an entire car in 20 hours. The management structure was also flattened.

In the early 1990s when the auto market crisis led to the biggest losses in Volvo's history, the Uddevalla and Kalmar factories were shut down. There are competing analyses of the rational behind these decisions. Sandberg (1993) suggests that management's decision to close the factories should not be taken as a victory for the Taylorist or Toyota-model styles of production which characterize the Volvo factories which were not shut down. Rather, Sandberg argues that other factors such as over-capacity, marketing mistakes, a miscalculation of cost-savings by concentrating production in the alternative location, internal company and union politics, and concentration of power in Gothenburg, were at the root of the closures.

Cressey (1993) adds to Sandberg's (1993) theme by arguing that the real economic and social gains to management and the workforce of Volvo's innovative workplaces were substantive. However, these were undermined by a specific set of circumstances which should not be taken as evidence that the lean production model at Volvo's other factory was in any way superior.

The Volvo case is important because it represented a significant management decision to retreat or pull away from workplace innovation based on high productivity and rewarding jobs to a lean production model where the needs of the production process drive workplace organization (including team work and multiskilling) without the ethical, humane features of the Volvo model which is more based on partnership with the union/worker and an elevation of the human needs of the workers.

III. Findings of Case Studies

1. General Findings of Case Studies

This report provides a summary of workplace innovation in eighteen European companies, primarily occurring since the mid-1980s (see section V). This is not meant to be an exhaustive list. Rather, these are meant to be representative of the major types of workplace innovation being undertaken, along with a few examples of "watersheds" in workplace innovation. This section of the report provides:

- a brief overview of the major types of workplace innovation identified in the case studies; and
- a list of the major findings or lessons of the case studies.

Types of Workplace Innovation

The case studies cover a range of industries and companies across Europe spanning a ten-year timeframe. They illustrate the types of workplace innovations that companies and unions have been involved in, primarily in response to intense competitive pressures, fluctuating demand, new technological advances in the industry, etc. For the most part, these case studies are of unionized companies and discuss the agreements on workplace innovations and change reached between management and the trade unions representing the company's workers. In some instances information is also provided on the arrangements covering the non-unionized staff.

It is important to note that the findings suggest that workplace innovations are not usually introduced on a "one-off" or discrete basis. Rather, in the companies studied (which were under serious pressures), a bundle of changes - often representing trade-offs between management and unions - seem to be introduced either together or in succession. Below are some highlights of the workplace innovations identified in the case studies:

Changes in the Scheduling and Distribution of Work

- Faced with legal requirements for shortened work weeks in most countries, companies and unions are negotiating agreements that provide for greater flexibility in the scheduling of work. Faced with competitive pressures, a major way to increase productivity without incurring additional capital costs

for employers is to extend the period of utilization of facilities and equipment. Two developments in this area are: first, extending the hours of the day that facilities are in operation; and secondly, adding an extra day of production with Saturday working time.

- Within these expanded working times, employees are given more flexibility in the scheduling of their working time around core hours of business. Shifts are also being implemented which give workers, in effect, long weekends every few shifts. In some cases teams are left with the responsibility to ensure that they have sufficient members working to get their job(s) done. Voluntary staffing of Saturday shifts has also been practiced. There is also more flexibility in the amount of "banked" time employees can carry.
- Working from home is also being introduced as a way of increasing flexibility.
- Some companies are implementing continuous production and doing away with lunch or other regularly-scheduled breaks and down time.

Changes in the Organization of Work

- Some companies have responded to competitive pressures and reduced demand by significant downsizing of the workforce. In some instances workforce reductions have been achieved through reliance on early retirements or other voluntary measures.
- Major changes include reducing the number of levels in the organizational hierarchy and consolidating and reducing the number of discrete occupational or job categories. Increased functional flexibility can be required as a result of downsizing.
- Team-based organization of work is being introduced to enhance quality and increase the functional flexibility of the workforce. Teams provide for collective responsibility and more autonomy from direct supervision. They are often accompanied by a reduction in supervisory staff as some supervisors become redundant.
- Additional training is involved in the implementation of team-based work to broaden the skills of team members.
- In some cases companies have recognized that job enrichment makes employment more attractive to prospective employees, especially in tight labour market situations.
- While the introduction of new technology is often viewed as a threat to workers' jobs, unions also recognize sometimes that without new investment in technology the plant/facility may not be viable in the long-run.

Changes in Personnel and Human Resource Management

- Companies are moving to variable pay systems to provide a clearer link between effort and productivity. In addition to providing performance-based pay incentives for individual effort, companies are implementing pay practices which provide rewards on the basis of team efforts. Incentives are

linked to either achieving or surpassing production goals. In some cases workers/teams are involved in the identification and setting of performance targets. Companies are also tying compensation to the profitability of the company. In some cases a variety of performance-based compensation is available, thereby linking pay to company, team, and individual performance.

- Broadened job descriptions and team-based work have required additional investments in training for workers. In some cases compensation has been linked to the acquisition of training and new knowledge/skills, i.e., knowledge-based pay.
- Workers and their unions are being supplied with more information about their companies' performance, profitability, and competitive pressures to increase the understanding of the links between external factors, company performance, and working conditions and compensation. In many cases, awareness of the company's financial, etc., position has been a main factor leading the union to accept concessions in pay, changes in work organization and scheduling, etc.
- In some cases there has been a move away from vocationally-based training to company-based training.

Innovations in Industrial Relations

- Many European countries already have requirements for company-level employee-management consultation and decision-making through works councils. The European Union (EU) Directives are making these more pervasive. Where works councils were not already in place in the case studies, the need to restructure sometimes led to the establishment of new consultative processes or structures. Understandably, where works councils were already in place or collective agreements already provided for consultation, unions resisted the establishment of another set of parallel consultative processes which might weaken their position.
- In some companies/sectors, unions and management agreed to alternative dispute resolution processes to facilitate the resolution of disputes. This could entail processes of review, mediation, and finally, external arbitration.
- One company studied provided support for union activities through special payments made to trade union members that could be passed on to the union.
- In some cases employers are offering employment security for specified periods of time to gain union support for restructuring changes. However, unions themselves often view the required workplace changes as essential to ensure the future viability of the company and their jobs and, therefore, see the changes as the way to enhanced employment security.
- Some restructuring has included outsourcing of non-core services or even replacement of regular employees by contract workers.

Major Findings of Case Studies

A number of themes emerge from the case studies regarding the nature of workplace innovation:

- In almost all cases, the employer's interest in workplace innovation is driven by competitive pressure and a fairly critical financial situation.
- Unions acceptance of workplace innovations that increase productivity, etc., are often based on their concerns regarding job loss or loss of investment/modernization if changes aren't implemented.
- Workplace innovation is often introduced as part of an overall strategic business plan.
- The existence of processes for union/employee involvement/consultation at the macro-level can facilitate union acceptance of workplace change and innovation at the workplace level.
- If there is already a positive industrial relations climate at the workplace, this will facilitate the introduction of workplace change. There are many benefits of a high trust environment.
- Acceptance of workplace change may be higher if unions/employees are involved from the front-end of the change process.
- The full effectiveness of changes in work organization is enhanced by changes in compensation, personnel relations, etc.
- Negotiating productivity improvements with the union will often require tradeoffs for the union in the areas of training, job security, etc.
- Alternative dispute resolution processes can assist in reaching agreements on workplace innovation and its implementation.
- Incremental introduction of change can facilitate its acceptance by employees.
- Unions/employees may find technological change easier to accept than changes in work organization.

IV. Implications for Canada

The European countries each have their own national characteristics which are important factors in explaining the timing and type of workplace innovation undertaken by companies in the different countries. However, as a generalization it can be stated that they are all characterized by a level of integration of unions - either at the political level or industry/workplace level - which is greater than in Canada. (Quebec may be an exception to the Canadian case).

There are, however, some implications of the findings from the European case studies for the nature and application of workplace innovation in Canada. Some of these are listed below:

- Any measures or arrangements which bring unions and management together to pursue common interests will be supportive of workplace innovation. For example, sectoral-level consultation can build a foundation for the parties to address workplace restructuring and change.
- The adversarial approach to the formal resolution of conflicts, e.g., grievance procedures, may not be best suited to addressing the types of disagreements that may occur around work place innovation. Alternative dispute resolution processes may facilitate timely resolution of disputes and maintain a more conciliatory relationship between the parties.
- Increasing the level of common understanding between the workplace parties, e.g., information regarding competitive pressures, technological advances, market conditions, etc., may foster an environment which is more supportive of workplace innovation.
- Pilots or demonstration projects which highlight successful implementation of change, e.g., the introduction of technological change, may serve to encourage the parties to reach agreements regarding change at the workplace/sector/industry level.
- Changes in management attitudes, approaches, and skills are important in fostering workplace innovation. Education and training of management as well as union representatives in innovation is important. For example, an understanding of and openness to the areas/types of tradeoffs acceptable to each party is important.
- Industries or sectors with a high level of capital intensity may be most likely to require or benefit from workplace innovation. This suggests that targeting

supportive resources to these sectors/industries may make more sense than a blanket approach.

- Unions may be deeply divided over the issue of workplace innovation. Pressures at the workplace level may lead union locals to want to embark on workplace innovation that is not supported by the union's central bodies. This factor needs to be recognized when negotiating workplace innovation.
- Any factors which increase the level of mutual trust between unions and management will facilitate joint approaches to the development and implementation of workplace innovation.
- Sector- or national- level policies/processes that increase consultation between unions and management provide a support for innovation at the workplace level.
- A serious external threat - competition, technology, demand - seems to be an important factor in focusing the workplace parties' attention on innovation and change initiatives. Having a good workplace relationship between the parties facilitates meeting these challenges successfully.

V. Case Studies

Case Study Summaries

1. General Motors Corporation in Austria and Germany (Shire, 1994)

Focus of the Study

This is a comparative study of the reorganization of production by General Motors Corporation at locations in Austria and Germany. It argues that the variations in the reorganization of production at the different locations is explained by the differences in the national systems of collective bargaining and political representation, especially by the degree of external union regulation of workplace bargaining.

Background

Germany and Austria share strong similarities in works council legislation, collective bargaining practices, vocational training systems, and the occupational structure of labour markets. However, in the post-World War period, there has been a pivotal difference in how trade unions are institutionally integrated into the political and economic structures.

Most importantly, in Germany, unions have the legal right of representation on company boards of directors of all large enterprises. This gives the external union direct contact with local labour representatives and the ability to regulate workplace bargaining activity. This influence is exercised at the national, regional, and local levels. In Austria, on the other hand, union officials have direct representation through corporatist political institutions and the political party system and have extensive participation at the societal level in macro-economic policy-making. Shire (1994) contrasts the "industrial democratic bargaining regime" of Germany to the "social democratic bargaining regime" of Austria.

In Austria, wage bargaining is nationally regulated through the bipartite Parity Wage and Price Commission although wage settlements are negotiated at the local firm level. There is a high level of wage drift and differentiation because of

the relative decentralized wage bargaining. In Germany, the national union federation has no formal legal political bargaining authority; however, the strong unions are able to impose discipline on local labour representatives, thereby limiting wage drift and differentials between firms.

Shire (1994) describes General Motors Corporations' teamwork concept as enabling workers from all job and skill classifications within an area to work in a team collectively servicing and maintaining a machine set or process segment of production. Teams are characterized by collective responsibility and have a degree of autonomy from direct supervision. The role of the foreman is changed from direct supervision to co-ordination, in the long run becoming redundant. Team meetings are used to enhance internal co-ordination.

The teamwork design also features an incentive system to encourage lower skilled workers to increase their range and depth of skills and is supported by a pay-for-knowledge wage system tied to integrating direct and indirect work to increase the flexibility of the workforce. This is enhanced by a shift from vocationally-based training with external certification to in-house on-the-job training. Management expects this to reduce the overall cost of training and expand the productive capacities of some workers while giving management control over the development and flexible deployment of skilled labour.

Methodology

Data for the study was gathered through twenty-one open-ended interviews with local works council representatives, managers active in planning and negotiating the reorganization of work the General Motors' subsidiaries in Germany (Opel) and Austria (GM-Austria and Rochester Products Austria (RPA), trade union officials, and in the Austrian case, government staff and officials. The interviews were conducted in 1988 and again in 1991. Two plants in each country were studied. Questions included the negotiation of details of the new teamwork agreements; the autonomy of teams from supervision; the new wage system and its relation to 'continuous improvement'; and the inclusion and functioning of a joint labour-management committee.

Findings

Team Autonomy: Teams were introduced in Austria and team elections held from the beginning of the initiative. However, in Germany there was a great deal of conflict over team leader elections. The German unions already had workplace elections of shop-floor representatives and would have elected these same representatives to team leadership. This posed a concern for management regarding the concentration of power in the union representatives in the teams. They were on the verge of changing the design to retract the election of team leaders and replace it with the appointment by management of team leaders. However, they conceded this point at one of the locations,

resulting in one of the plants having elections and other having appointed team leaders.

Joint Consultation: In Austria the joint labour-management committees have become a cornerstone of consultation and implementation of the new work organization. In Germany management refused to create committees with such wide-ranging influence as they were concerned that they would increase the already considerable influence of unions through the works councils. Instead, there are ad hoc joint committees. The German union sought assurances that teamwork would not undermine the legal rights and responsibilities of the works councils and developed alternative proposals for group-work for the reorganization of production.

Pay-for-Knowledge Wage System: Two versions of the pay-for-knowledge concept were implemented in Austria. At one plant, the works council opposed the collapse of skilled labour into a knowledge-based wage scale. At the second plant, skilled labour was integrated into a unitary wage scale and it became possible that workers without vocational certification could move into skilled jobs with the help of on-the-job training and short courses. The greater variability in Austrian negotiated wages at the local level presented management with more opportunity to add local wage supplements.

Additionally, in Austria the study revealed that management moved during the implementation of the new wage system to end external recruitment of skilled trades workers (direct or production workers), relying instead on upgrading for current semi- and un-skilled workers (indirect production workers) to meet the demand for skilled workers. Unlike the vocationally trained skilled workers, these workers have no guarantee of eligibility for similar jobs at other companies. The success of the pay for knowledge approach in economic terms has been a reduction in the ratio of direct to indirect production workers from 1:4 to 1:7 with a labour cost savings of 10 per cent.

Conclusions

Shire (1994) explains the German managers' reluctance to introduce General Motors' teamwork strategy and the outcomes of its negotiations with the unions over this issue by the greater regulation of company affairs by German unions than their Austrian counterparts. German managers did not want to extend the already extensive influence of the unions in the management of enterprise matters that team leaders and joint committees might have entailed. The relatively lower level of union influence at the local level by Austrian unions made management more willing to implement team work and its corollaries.

German managers never attempted to negotiate a similar system; however, they did collapse forty-two wage categories into ten and standardized the form of payments to workers. This is explained by the tighter external union control of

wage determination at the local level in Germany which had out priced the ability of the company to add knowledge premiums to the collectively bargained wage base. The Opel works council bargained hard to prevent wage differentials on the basis of internal team knowledge promotion decisions which would introduce inequalities between team members in violation of the German trade union norms of wage solidarity. How teamwork was introduced was found to be heavily dependent upon the union-management relationship and joint processes in the two countries.

2. New Technology in Chemicals, Engineering, and Finance in Britain, Canada, Germany and Italy (Smith: 1994)

Focus

This is a comparative study of the introduction of new technology in process industry (chemicals), small batch engineering, and finance industry enterprises in four countries. The underlying assumption is that technological and organizational change involves a process of choice and negotiation that offers scope for managers, unions, and workforces to play a significant role in determining whether change occurs and, if it does, its implementation and outcomes.

Smith (1994) argues that centralized and cooperating union confederations can structure the nature of workplace activity, and hence how new technology is introduced, in a number of ways. Where unions have a high degree of central control and density of membership is high, union confederations are likely to have a more strategic approach to members' interests and to be able to secure national agreements and legislation. The integration of different levels of union organization permit co-ordinated bargaining at various levels thereby giving local unions greater influence over the strategic aspects of technological change as well as the immediate and direct implications for working conditions and wages.

Smith (1994) posits that centralized but low density union confederations are more limited in their abilities to influence strategic decisions and affect legislative and national agreements. In the case of decentralized unions, there is a limited likelihood of national agreements or legislation, and the strength of union development and organization at the local level will have more importance on the timing and outcomes of technological change.

Background

The theoretical framework offered above provides the basis for the analysis of the findings at the different enterprises in the four countries. Similarities and differences between the planning and implementation of technological change and negotiations between management and labour representatives are examined. The existing relationships between management and labour in each national context is characterized as "participative", where unions influence decision-making in their firms through collective bargaining or other formalized and explicit arrangements for worker participation such as German works councils or Italian institutionalization of procedures and joint committees. In contrast, "collective bargaining relationships" in Britain and Canada were characterized by lengthy antagonism between management and unions, weak interunion relationships, few consultative mechanisms and a focus of conflict over union rights and management style.

Methodology

Research in each country was conducted in a process industry, small batch engineering, and finance with a matched set of workplaces in Canada. The research was undertaken in the mid- and late-1980s through structured and unstructured interviews, observations at meetings, and analyses of documentary sources. Line managers and worker representatives were the subjects of the bulk of the interviews. Formal and informal meetings were observed.

Findings

The unions in Britain and Canada relied on collective bargaining to influence the consequences of changes on the traditional issues of employment, health and safety, and pay, etc. In Italy and Germany, on the other hand, the unions tried to intervene and influence decisions at the more strategic level, reflecting the more formalized and explicit arrangements in those two countries for workers to be involved in the processes of technical and social change. They also attempted to influence the implications of new technology on job content and work organizational

Conclusions

Smith's (1994) study illustrates the importance or saliency of the existing conditions or characteristics of the relationships and arrangements between labour and management for the way in which technological change is introduced. Where there are already formal information-disclosure arrangements, assumptions regarding relationships and behaviours that emphasize consultation/participation, the introduction of new technology will be consistent with these established processes and practices. Further, where industrial relations relationships are nonantagonistic and there are participative

systems, the process of debate on new technology can lead to quite a wide degree of agreement.

Smith (1994) concludes that the limited institutional representation for workers in the Canadian and British collective bargaining systems do not provide the necessary framework for successful innovation. The institutional systems of industrial relations have a great influence on developments at the workplace level regarding the introduction of technology. Collaborative processes are more likely to be successfully pursued where there is already a tradition of co-operation and consultative processes, either formal or informal.

3. United Kingdom Vickers PLC - Employee Communication (Hughes: 1988)

Focus

Hughes (1988) study of the company's development of wider employee involvement describes the importance of this to the company's ability to implement significant workplace changes without resulting in serious workplace conflict.

Background

Vickers and Rolls Royce Motor Cars were merged in 1980 bringing together over 30 different businesses and a workforce of over 31,000. By 1985 they had been totally restructured into six main-core businesses comprised of 20 businesses and the workforce had been reduced by over half. In the context of the recession of this period, the company instituted restructuring, product rationalization, works closures, and reduction of other business lines. New facilities were established and there were significant changes in local working arrangements. However, no serious disruption occurred in Vicker's operations during this time period.

The company had a strong commitment to the active involvement of all employees and saw it as key to the well-being of the employees and the health of the company. Knowledge was viewed as essential to gain employees' understanding and cooperation, especially in a period of uncertainty.

In 1980 all company units were given a two-year target for the introduction of a team briefing system to keep employees informed of the performance, prospects, and opportunities of the business; of matters likely to affect the

business; of administrative changes; and of the situation and performance of their own departments. Team leaders are the main communicators, providing employees with the opportunity to discuss the subjects with their leaders.

The briefing system has respected the procedures and roles of the unions vis-a-vis their members. The national union officials are briefed annually on the company's performance and prospects.

Methodology

(not specified)

Findings

A 1984 audit of the company, including personal interviews with about 10-15 % of employees at all levels of the organization, reported the following findings:

- team briefing was working
- employees had a greater understanding of the realities of business
- workers at the shop floor appreciated being talked to directly by management and felt a greater identity with the company as a result
- company units which had operating briefings for the longest period of time gained the most benefits

Conclusions

Hughes (1988) concludes that an understanding of the company situation and challenges by employees, facilitated by employee communication, improves workplace relations and the capacity to respond to difficult challenges without disruption in workplace relations and conflict.

4. Gothia Tobak and the Swedish Food Workers' Union (Levinson: 1996)

Focus

Levinson's (1996) study of the introduction of an integrated production process explores some of the issues associated with participation by the union through workplace-level codetermination (participation) in the planning and implementation of change.

Background

Gothia Tobak in Gothenburg is the only Swedish producer of moist snuff. In 1991, 220 of the 280 employees were engaged in direct production. The manual workers are represented by the Swedish Food Workers' Union and other workers belong to employee associations/unions, e.g., Association of Graduate Engineers.

Swedish codetermination and industrial relations provided for co-operative relations between the central union and employer associations in the country. Extending this to the corporate and workplace level was promoted by legislation such as the Act on Codertermination at Work which encouraged local agreements at the industry, enterprise, and work group level. The objective was to promote the cooperative development of working methods and organization at the shop-floor level with a commitment from union and management to cooperation.

At Gothia both management and the local union shared an interest in improving the conditions of work for the factory workers. Management also wanted to ensure that the enterprise would be able to recruit new workers and felt that increasing line workers' responsibilities and skills would improve quality and productivity. Management already had a practice of discussing significant change before implementation with the union and there was an atmosphere of mutual trust.

In 1987, management decided to expand production capacity by enlarging the factory and installing a new production line. The need to increase capacity provided the impetus for implementation of changes in the organization of work. The union's strategy was to be involved from the beginning in the workplace change. A number of committees were set up representing the four unions, management, and the occupational associations. The parties shared the objective of making the work of production workers more interesting and enhance the skill and problem solving of the workers.

The group developed a proposal for integrated codetermination, which has become known as the "Gotha model", which includes:

- permanent production groups with responsibility for planning and allocating work, problem solving, training and enhancement;
- a 'development ladder' for career development and the devolution of tasks from management through to the shop floor;
- pay linked to skill acquisition; and
- leadership at production team level.

A pilot production group was selected and trained in the new approach which demonstrated the advantages - higher level of commitment to tasks, enhanced job knowledge, collaborative problem solving, improved productivity and quality. Following this, the integrated model was introduced to the rest of the factory through processes which included union involvement and employee consultation.

Methodology

Data were collected through interviews with union and management representatives in January 1993 and March 1994.

Findings

The results of implementation of the new work model included increased productivity, enhanced training and career development opportunities, and improved motivation and job commitment.

The Gotha process demonstrates how the union's participation through committees, work groups, etc., can support the introduction of a more participative model of production work organization.

The union viewed the major advantage of the integrated codetermination model at the workplace as the improved access to decision-making and opportunity to influence the formulation of ideas regarding workplace change and organization. Levinson (1995) contrasts this with a negotiation-based regime of union influence where the union's influence is largely at the back-end of the decision-making process and limited to accepting or rejecting management's proposals.

There were some tensions between union members and shop stewards in the form of mistrust that the union representatives were really making a difference in the committees and planning groups. Much of this related to communications problems. Other union members felt that their representatives were too easily influenced by management's views.

Conclusions

A foundation of union consultation and participation prepares organizations to address the challenges that result from the introduction of changes in the organization of production. Further, union involvement confers legitimacy to the new organization and increased the commitment to the innovation. It also provides management with access to union expertise in production matters.

5. New Technology and Restructuring at British Coal (Leman and Winterton: 1991)

Focus

Leman and Winterton's (1991) study of the introduction of new technology and restructuring at British Coal highlights the relationship between the labour process, economic restructuring and the introduction of new technology.

Background

British Coal's dual objectives of profit and cost-containment has been manifest by its introduction of new capacity involving significant capital investment, increased productive capacity through the introduction of new technology and changes in the techniques of production, as well as closure programs for pits judged to be uneconomic.

The 1984-85 strike was a watershed in industrial relations at British Coal which left the union and workforce demoralized and weakened. Collective bargaining became more decentralized and the influence of the union at the local level was diminished. Management's offensive in the wake of the strike involved attempts to restructure industrial relations at the pit/colliery level.

Leman and Winterton (1991) argue that management's attempts to introduce flexibility in working time, occupational boundaries, level and type of employment, and compensation reflect its pursuit of profitability and competitiveness and comprise a coherent management strategy.

Methodology

Interviews with management and union representatives at all levels of production over a six-year period following the 1984-85 strike and site visits to study the new technology.

Findings

Leman and Winterton (1991) identify four forms of flexibility that British Coal attempted to introduce:

- temporal - the extension of the working week and number and length of shifts;
- functional - the elimination of boundaries between functions and jobs;
- numerical - increasing the use of temporary, subcontracted labour; and

- financial - ad hoc payments for extra work and modifications to the incentive system.

They note that the miners viewed functional flexibility as an effect of lower employment levels, related to management's productivity goals, which made it necessary for workers to broaden the range of tasks they performed. For its part, management "explicitly acknowledged" that introducing flexibility in association with new technology amounted to deskilling as the traditional boundaries between craft and production work in mining are eroded. On the other hand, the union supported the multi-skilling of the less skilled workers.

The study found that the pursuit of a flexibility strategy was directly related to the level of capital intensity at the coal fields. In fields with a low level of capital intensity, the company's approach to productivity improvements were based on approaches such as the intensification of work.

The application of new technologies was also a factor at British Coal in increasing the flexibility of staffing in the area of safety. Specifically, computer monitoring of environmental conditions provided the opportunity for British Coal to reduce the commitment of staff to safety enforcement. Some locations are relying heavily on subcontractors to perform craft work using new machines, thereby reducing the employer's training and supervision costs.

British Coal also relied more on special payments for certain projects outside the normal working arrangements and bonus payments at the pit level. Payments were increasingly linked to tonnage/output/profit/.

Leman and Winterman (1991) identify the divisive effects of such management strategies on the workforce and its general weakening of the unions.

Conclusions

The total restructuring of the British coal mining industry in the 1980s was manifest in the new patterns of industrial relations. Technological change and work reorganization were utilized to enhance productivity. New technology was linked to management's interest in increased flexibility in work time practices and it facilitated the reduction in craft-specific jobs. Different forms of flexibility were introduced at work sites depending on the capital intensity of operations, available technology, etc. However, the defeat of workers in the 1984-85 miners' strike was the major factor leading to attempts to restructure the labour process and industrial relations. Accordingly, the authors hold that there is no deterministic relationship between economic and technological restructuring and restructuring of industrial relations or the labour process.

6. Aux Assurances and CFDT, CFTC, and CFECGC (EIRR 201, October 1990)

Focus

Aux Assurances, an insurance company in France, signed an agreement with the three union confederations which represent its staff which expanded the exercise of union rights and staff representation. The federations are the confederation francaise democratique du travail/French Democratic Confederation of Labour (CFDT); the confederation francaise des travailleurs chretiens/French Confederation of Christian Workers (CFTC); and the confederation francaise de l'encadrement/French Confederation of Technical, Supervisory and Managerial Staff (CFE-CGC).

Background

The Aux agreement had four main features:

- The agreement goes beyond the statutory obligations for annual company-level negotiations with the establishment of an obligation to reach an agreement. The unions are provided with time and information during the negotiation period. Failing settlement, an external "expert" will make a binding decision between the final offers of both sides.
- The employer will provide each employee with a "trade union cheque" worth four hours of pay which can be either paid to the union of their choice or not used at all. This is significant as there is not a "Rand formula" arrangement in France for union dues.
- The period of office of employee representatives was increased and improvements were made in the operation of central and workplace works councils. The operation of existing economic and training subcommittees was improved with equal representation of employees and management, as well as trade union representation.
- Enhancements were made to the training of trade union representatives in the economic and social field and the position of the company. Provisions were made to ensure that the trade union representatives do not suffer in terms of pay, promotion, etc. Trade unions representatives were given paid time off for union business that can be used individually or pooled.

Methodology

(Not specified)

Findings

EIRR (201, October 1990) notes that the largest union confederation (CFDT) has welcomed these changes. CFE-CGU characterized the agreement as a "true social pact...(which) takes people into account in relation to capital". CFTC has described it as an "advance in collective bargaining".

However, two unions which did not sign the agreement have viewed the new "trade union cheque" as an interference in union affairs and accused the company of trying to buy union peace at a time when the company was going through a major reorganization.

Conclusions

The article does not discuss the implications of the agreements after implementation.

7. BMW Regensburg - New Shift Arrangements (EIRR 197, June 1990)

Focus

A new shift work arrangement was introduced at BMW at Regensburg, one of the most modern plants in Europe in 1987. The shift work arrangement included rolling and rotating shifts for blue collar workers and flexible working hours for administrative and management staff. The model adopted offset the cost and competitive disadvantage associated with shorter working time with working time arrangements that extended plant operating time.

Background

According BMW management, the new shift work arrangement was implemented to make most efficient use of costly facilities and equipment while accommodating a progressive deduction in working hours. The features of the arrangements are:

for blue collar workers

- nine-hour shifts with individual employees working on average 33 hours/week
- weekly plant operating time of 99 hours spread over six working days with two shifts on Monday to Friday and one shift on Saturday
- early and late shifts and individual days of the week are alternated between three groups of employees
- every month each employee have a block of five consecutive days free but will also have to work on one in three Saturdays

- one out of every three weeks of a shift cycle employees only work for three days
- workers have to work one "compensatory" shift every four weeks (11/year) during one of their normally free days
- Additionally, the former three-week summer shutdown for repair and maintenance was replaced. Machines no longer shut down for collective relief and lunch breaks through flexible breaks and the utilization of multi-skilled workers trained to perform any functions of a work group.

for administrative and managerial workers

- flexible working hours within a bandwidth of 6:30 to 18:00. Core time is 8:30 to 14:30 when all employees are required to be present
- work time is distributed over six days and 10 per cent of employees must be present on Saturday
- workers can work up to 10 days over a two-week period

Methodology

(not specified)

Findings

The company reported that the benefits of shift-work included:

- production increase of 35%
- increase in employees from 2,418 to 3,300 - resulting in 900 new jobs
- maintenance of low level of absenteeism, even on Saturdays
- excellent production quality maintained
- positive response by employees and management to the new system

The following problems were also identified in the report:

- strain on communications between management and workers because of the rolling shift patterns and long blocks of consecutive free days
- difficulties in getting employees to take their regular holidays because of the four day weeks
- difficulties for employees who wished to take courses/training offered on Saturdays
- IG Metall (the major union) opposed flexible working time that include Saturdays. However, the union at the local level agreed to the move to flexible hours, primarily because of local labour market conditions which made the provision of additional employment under the scheme very attractive.

Conclusions

The company and IG Metall have disputed each other's claims regarding the impacts of the new work system.

8. BMW - New Pay and Working Conditions (EIRR 271 August 1996)

Focus

New personnel policies are being developed to improve employee performance following changes in working time and work organization. BMW developed a new performance related pay system and increased the use of flextime as part of its strategy.

Background

Set against the country wide reductions in working time in Germany, beginning in the 1980s, companies have had to address increased global competition and over-capacity. Accordingly, companies have looked to increase productivity through greater efficiencies through cost reductions and increasing individual performance. Following the introduction of greater flexibility in working time, BMW implemented new work organization based on teams as a pilot. This has been complemented by performance-based pay system for both production and administration employees.

The new agreements took nearly half a year to negotiate between company and employee representatives.

Employees have been organized into self-managing organizational units of between 8 to 15 workers with a high degree of autonomy. Group members decide on each person's responsibilities and the rotation of jobs. Each group elects a spokesperson who co-ordinates activities and represents the group to the company. Direct supervision is up to the group while the supervisor is responsible for discipline and technical matters, proposing objectives, etc.

Management expects the new work organization to increase the usual two per cent productivity increase to four per cent.

Under the new pay structure the emphasis is on quality and contribution to group performance. Production workers have a bonus system with performance targets. Basic remuneration is based on minimum pay set for the industry plus a 10% BMW supplement. A 25% additional bonus is available if quotas are met.

Personal supplements are payable if an individual contributes to the group's results. Expectations and targets are discussed between employees and supervisors. One-off bonuses are also available for a specific contribution to improved production.

The flextime system for production work provides for extra work outside of a core set of hours to be banked without incurring overtime hours which can be used as free time when demand is low. Banked time can be accumulated over several years.

In return for employee flexibility, the company has made a formal assurance of job security. During the 1993 recession there were no cutbacks in jobs and additional staff have been employed during 1994 and 1995.

Methodology

(Not specified)

Findings

The new work organization and pay scheme are seen as critical to maintaining the position of the company in the global environment. The new arrangements promote quality in production plus flexibility in staffing, thereby securing jobs and employment.

The costs to the company related to staffing are lessened as the core of experienced staff are available to meet increased in demand without constant maximum staffing costs.

IG Metall welcomed the employment security that flexible work time has brought. Flexibility in scheduling working time has allowed workers to pursue educational and recreational interests.

Conclusions

New working arrangements in response to competitive and market pressures have been agreed to between employee and management representatives. They have significantly changed the traditional patterns of factory production and remuneration.

9. New Industrial Relations Policy at Renault (EIRR 194, March 1990)

Focus

Following one-and-a-half years of negotiations, Renault and five of the six union confederations signed a collective agreement in December 1989 which included significant changes in order to ensure the company's recovery and guarantee sustained success in the face of international competition.

Background

In the context of increased international competition, Renault undertook some significant changes in the early 1990s. With plans to reduce the 70,000 workforce to 45,000 over the next few years, this included closing a factory at Billancourt, introducing a third shift at Flins which would entail more flexibility in plant utilization and staffing, and a new agreement with its major unions.

The agreement's features included:

- management improving its planning for change to allow workers more time to acquire new skills. This is complemented by improvements in the company's training plans.
- a career development system including structured career paths for new employees, evaluation and career guidance, better communication with employees about job opportunities within the company, improved redeployment system, external redeployment assistance
- "professionalization" of lower-level staff through requalification programs and retraining in new skills
- new forms of work organization into multi-skilled teams with a simplified organization structure
- new arrangements in working time such as round-the-clock working, continuous working for economic reasons, changes in the daily distribution of working hours, rotation of weekly rest days. Additionally, a joint technical committee was set up to look into the organization of working time.
- provision for greater cooperation in health and safety
- creation of a new professional career structure allowing for transfer between career paths, reduction in supervisory levels
- extension of senior management pay system of annual pay plus a "performance bonus" of up to 15% to technical and white collar staff

- renewal of profit sharing plan based on company's financial results and individual performance of each plant

Methodology

(Not specified)

Findings

The report does not include impact of the changes.

Conclusions

While the report does not include conclusions, the changes at Renault were in response to its external competitive environment.

1997 Update on Renault (EIRR 278 April 1997)

In the spring of 1997, Renault became the center of controversy with management's decision to close its operations in Belgium - a highly unionized work-site with a good working environment - without even notifying the union beforehand. The plant to be closed was characterized as having a flexible workforce, high productivity, and a stable industrial relations climate. The international press covered the protests that were held in several European countries where Renault has operations. This serves as a reminder that conditions and management practices can change significantly over time. Even workplaces where workplace innovation has been implemented and the industrial relations climate is stable, can be affected by factors beyond the individual workplace.

10. Waterford Crystal (EIIR 187, August 1989 & 239, December 1993)

Focus

Waterford Crystal, a major Irish company, undertook a radical cost-cutting initiative to recover from years of losses at its manufacturing base in the Republic of Ireland. This took place in a series of step over the past decade.

Background

Waterford's economic success during the mid-1960s to mid-1980s allowed for increased wages. However, the piece rate system resulted in output not always meeting demand for certain products. Once recession hit, the wage increases and high proportion of the workforce at the end of the apprenticeship program

were no longer viable. Significant changes began at that point and new agreements were reached between the company and union.

Methodology

(Not specified)

Findings

Following the failure of a major rationalization plan, which saw 1,000 voluntary redundancies of skilled workers and significant company losses, Waterford Crystal and the Amalgamated Transport and General Workers' Union (ATGWU) reached agreement in 1989 on a profit sharing scheme starting with an initial compensation freeze and a profit-related pay package if the company fails to make a profit. The profit sharing scheme would give 5 % of profits to workers in the form of share options, cash or increased pension contributions at the point at which the company regained a profit-making position.

As part of a general restructuring plan, the union also agreed to productivity improvements and new quality controls. A joint committee would monitor product quality and customer service. Marketing, production, performance, new technology, personnel planning, and financial results and forecasts would be discussed by joint management and workforce company council. The ATGWU planned an education program for its members on share ownership, and was looking into ways to pool dividends to facilitate cash-outs.

Then in 1990 Waterford experienced its first ever 14 week strike which ended with compensation concessions. The strike left the workforce demoralized, plant communications were poor, and most employees returned to work on a short-time basis. (The latter was partly facilitated by new technology introduced in 1987 that boosted output). Further, the company began producing a new line of product at its other plants that competed with the standard Waterford crystal and the company had begun some outsourcing production of the standard crystal abroad.

In 1992 the company approached the unions with a cost reduction program which included 500 redundancies, severe wage cuts of 15%-20%, changes in profit sharing and bonus schemes, contracting out of non-core activities, and a five year "peace clause". The Board was prepared to outsource more and more of production unless these demands were met.

The management implemented a communications campaign to gain worker acceptance of the demands. They were rejected by the workers and referred to the conciliation services of the Labour Relations Commission. The Commission's proposals were also rejected by the workers. Finally the Labour Court's recommendations, which made some concessions to the workers, were agreed to. These concessions included a 12 month moratorium on outsourcing,

a one-off bonus subject to profits, and improved benefits for those on disability benefits and special terms for craft workers facing redeployment to semi-skilled jobs.

Following the agreement, the company's director of personal was described as setting about to "build a social contract". A joint management/union task force was set up to examine profit margins on potential and currently outsources products. The union was cautious about the future, fearing job loss when new technology is introduced.

Conclusions

The report identifies a new management team as an important factor in securing the significant changes after the period of product-driven management that characterized the 1970s and 1980s. It also attributed the way in which the Labour Court carried out its duties as facilitating the agreement of the union.

11. Adam Opel AG (EIRR 187, August 1989)

Focus

Adam Opel AG, a subsidiary of General Motors Corporation, and its works council reached its first agreement to extend machine operating times in its West German plants in 1988.

Background

Opel is a leading motor manufacturer in West Germany producing over 20% of total automobile production in the country in 1988. The Opel arrangements were part of GM's overall strategy to increase capacity by 16% over a two-year period to meet expanding demand without building new production sites. This gives it greater flexibility to respond to fluctuating demand.

A further objective was to reduce unit labour costs and raise the level of competitiveness. West Germany at the time had the highest labour costs in world auto production and German workers' working time was far below that of its major competitors.

Methodology

(Not specified)

Findings

The main elements of the agreements were to allow management at Kaiserslautern to run new machinery for a maximum of 139.5 hours/week with three 8- hour shifts per day Monday to Friday, two 6-hour shifts on Saturday, and one 7.5 hour shift beginning Sunday evening and ending Monday morning. At Bochum and Russselsheim similar shifts were allowed to extend machine operating time to 136 hours.

In order to remove bottlenecks, multi-skilled production staff have the role of operating machines while other workers have their lunch or relief breaks.

The 1989 industry agreement between IG Metall and employers reduced the standard work week to 37 hours. Therefore, Opel workers were entitled to free shifts as compensation for their longer working time. Premium payments were made for weekend work.

The chairman of the Bochum works council claimed that management forced the works council to agree to the new working times by implying that failure to do so could change a decision to upgrade the location's machinery which would jeopardize jobs. At the other locations, union representatives also appeared to have been concerned that investment decisions were contingent on the working time agreements.

Unions and works councils also were concerned that Opel management was playing off individual plants against one another. IG Metall viewed the introduction of Saturday working time as a threat to the union's priority for a work-free weekend. It was also concerned that it would lead to excess capacity and put jobs at risk.

GM denied the existence of such a strategy.

Conclusions

High demand, strong competitive pressures, and an unwillingness to invest in new production facilities were behind the company's interest in implementing flexible work arrangements. Union representatives had mixed reaction to these new arrangements.

12. Analog Devices, Limerick Ireland (EIRR 270, July 1996)

Focus

Aalog Devices is a US owned company manufacturing high-performance integrated circuits with manufacturing facilities in the US, Ireland, Japan, Taiwan, and the Philippines. The Limerick facility is the only one of Analog facilities to be unionized. This reflects the union environment of Ireland. The nature of the union-management relationship has been an important factor in the introduction of workplace flexibility at the Limerick location.

Background

The Limerick management has had a single-union recognition clause from its beginning in 1976. Employment has grown at the facility from the original 50 to over 1,100 employees. The plant has a significant role in new product design and international marketing.

Methodology

(Not specified)

Findings

Because of the requirement for a rapid response to market changes, management has emphasized the ability to quickly change job content and responsibilities. Employee flexibility has meant an emphasis on training and TQM practices. All employees have daily/regular working responsibilities and improvement work to address problems that may arise and production contingencies.

Because the Limerick plant is in competition with other non-union Aalog Devices facilities, employee flexibility has been essential. Accordingly, Limerick has extensive team working arrangements and a new training program. It also utilizes new selection tools for recruitment.

Conclusions

The report draws two conclusions: first, that the practices at Limerick have been shaped by a combination of company and country influences; and secondly, that good union-management relations from the beginning allowed for adaptation to meet changes and challenges.

13. Bremer Landesbank and Variable Working Time (EIRR 230, March 1993)

Focus

Bremer Landesbank introduced a new variant on flexible working time which replaced compulsory attendance by the individual with the concept of service provision by the work group.

Background

Bremer Landesbank is the largest bank in Germany's northwest coastal region. About 10-15% of the workforce is unionized. In 1993 about 48% of the workforce was female and the average age of employees was 41.

The normal operation of flexible working time in Germany is based on core time requiring compulsory attendance and flexible bands for finish and start times chosen by employees. Management chose a new approach to flextime to meet the pressures for service in the context of successive working time reductions and to meet the wants of employees for more freedom and responsibility in arranging their working time.

The staff council had the right to co-determine working hours. Accordingly, the staff council was involved from the beginning in the development of the new system. There were some differences between the staff council and management during the negotiations. The staff council wanted the band width to start earlier than management - 7:00 instead of 7:30AM. The staff council wanted maintenance of the practice of an extra half-hour of informal (i.e., unrecorded) break time whereas management wanted all break time recorded in the new system.

The new system has a normal band width of 7:30 to 18:30; however, there are variations depending on the department worked. "Time-autonomous groups" have different function times based on their service delivery requirements, e.g., foreign transactions. The function groups propose their own core times and then are responsible for ensuring all of their required services and tasks are fulfilled.

There is considerable flexibility in the extent to which the actual hours worked may vary from the contractual hours in credit and debit hours. Staff are free to determine the timing of their breaks within statutory limits.

Methodology

(Not specified)

Findings

After 18 months of operation, the new arrangements were considered a success by management and employees. In particular, customer access to the bank's services had been improved.

Conclusions

Innovations in flexible working time arrangements can further individual employee personal interests and improve service quality.

14. Telecom Italia - Job Loss and Redundancy (EIRR 261, October 1995)

Focus

Faced with major redundancies, Telecom Italia and its unions agreed to an innovative agreement dealing with redundancies and work flexibility.

Background

Telecom Italia is the national telecommunications group slated for privatization. The workforce of 96,700 was to be reduced by 12,000 with almost 10,000 of these through reductions over a two-year period. The company was meeting all of the costs of the redundancies itself and new technology was to be used to address many of the new work requirements.

Methodology

(Not specified)

Findings

Under the agreement between the company and union, long service workers will be invited to resign with enhanced redundancy packages. Over- and under-staffing in certain areas will be addressed by technological advances allowing the re-routing of calls. Worker mobility to less popular regions will be promoted through incentive payments.

Workers faced with redundancy will have the opportunity to open a Telecom franchise selling Telecom products with the assistance of lump sum payments, training, etc. provided by Telecom.

Teleworking is being introduced on a voluntary basis. The Workers' Statute makes it unlawful to use audiovisual or similar equipment to supervise and control a worker's activity at a distance. This has required an innovative solution using indirect control by a light that switches on when an operator is at work - the same form of control as used with "in-house" operators. Workers who voluntarily agree to teleworking may request a return to office-based work after three years.

Conclusions

It is noted that unions have been generally opposed to teleworking, viewing it as a possible first step towards dismissal or the introduction of piecework. However, it is suggested that the unions seem more open to teleworking when it is introduced experimentally and on a voluntary basis.

15. BP Exploration and Gainsharing (EIRR 269, June 1996)

Focus

BP Exploration, a large British oil exploration and production company introduced a team-based gainsharing plan to provide a stronger link between teamwork, productivity, and pay.

Background

BP Exploration is a subsidiary of British Petroleum (BP) which is the world's third largest oil company. It is responsible for oil and gas exploration. The North Sea location is the company's most important oil source. BP Exploration has about 7,000 employees world-wide with about 2,500 staff at the North Sea, Dorset and Norwiegen sites.

BP Exploration's introduction was part of a broader corporate strategy to improve business performance. In the early 1990s, the centralized management structure was replaced with asset-based (source of oil or gas) organization to provide greater management accountability and clearer company objectives for employees. The company decided to examine its reward strategy under which employees received i) an annual base pay increase; ii) a generic performance bonus based on the performance of the entire BP group; and iii) an annual

individual or team bonus in recognition of good individual or team performance from a fund equal to 1% of payroll. The review found that the current system was not supportive of team-working and management decided to change the system.

Methodology

(Not specified)

Findings

The company was aware that gainsharing should be integrated within an overall business strategy program, with clear targets and rules. The first pilot was set up at a North Sea site for an initial five -month period covering a team of about 150 staff. The pilot results were encouraging to management - a high level of employee involvement, commitment and achievement with all business plans exceeded and a bonus of 3% to 4% of 1992 basic salary paid to employees.

Next BP Exploration introduced gainsharing for the rest of its North Sea operations. In 1993 a program was introduced covering about 2,500 employees working in 17 assets. It had two levels:

- 45% of staff were covered by an umbrella scheme with one set of company-wide performance targets
- the remaining 55% of staff were covered by asset tailored plans which linked team rewards to team performance within an asset.

The program replaced the individual bonus of the old pay system with a team-based bonus linked to completion of 1993 performance targets. Specific rewards for exceeding targets, i.e., for exceptional performance, were also available. The first team-based gainshare payments averaged 7%, with a range of 3% to 13%.

Line management and employees gave favorable reviews to the new plans. However, many employees were still unclear as to how it affected pay and productivity. The greatest changes in behaviour occurred in those employees covered by the asset tailored plans where the link between pay and productivity was clearest.

Accordingly, in 1994 a revised plan was introduced with the following features:

- simplified and standardization of plans;
- employee involvement in plan development;
- more asset tailored plans;
- more communication by management of linkages between business performance and gainsharing rewards;

- increased employee involvement through focus groups and regular reviews; and
- cost-reduction campaigns to reinforce the linkages.

The new plan based gainsharing as a reward for exceeding rather than just meeting company targets. Sixty per cent of employees were in plans based on asset-tailored targets and only 40% were covered by workforce umbrella plans. The three elements of 1994 employee pay were as follows:

i) base pay for delivery of business plan;

ii) team bonus for performance beyond the plan; and

iii) spot recognition for exceptual contribution by teams or individuals.

Based on good oil prices in 1994, the employees received a gainshare bonus payment worth 5% of base salary. A further 1,800 employees in the 17 assets received additional bonuses linked to production and safety measures which, with the 5% base salary increase, brought the average gainsharing payout to 13.7% of base pay.

A company review of the 1994 program identified employee support for the gainsharing program. It also found that employees behaviour was most aligned by performance targets they can influence and set up at the local level. Therefore, in designing the program for 1995, the following criteria were utilized:

- focus on key aspects of performance contract
- bonus payment only if performance exceeds target
- a trigger identified for bonus payment
- increased "exposure" to oil price/cash flow
- safety measures with appropriate weighting used in setting targets
- plans linked to the subsidiary's performance

The 1995 program had almost all employees (95%) covered by asset tailored plans. The gainsharing rewards can amount to 15% of an employee's basic salary

Conclusions

BP is continuing to review and revise its gainsharing programs. By 1996, most of the organization's variable pay around the globe will be based on team reward. Management claims that gainsharing has played a significant role in creating a culture where the relationship between pay and performance is visible, and management and staff involvement in design of the program has been valuable.

16. INI/TENEO - Spain's public sector metal working enterprises modernizes industrial relations (EIRR 243, April 1994)

Focus

The changes in the industrial relations system at INI/TENO, Spain's public sector metal working enterprises, illustrate the types of arrangements that can be reached at the sector/industry level to support flexibility and productivity improvements at the workplace. The agreement made significant reforms in the areas of dispute resolution, job categories, labour flexibility, and workplace participation.

Background

In 1993 an agreement was reached between INI/TENO and the metal working federations and union confederations following one-and-a-half years of negotiations. The agreement covered public enterprises in the iron and steel, shipbuilding, aeronautical engineering, aluminum and defence industries. These sectors had experienced significant workforce reductions in recent years and were loss-making sectors.

This agreement replaced a 1970 ordinance covering the metalworking sector for public enterprises. However, that ordinance remained in place for private metalworking enterprises.

Methodology

(Not specified)

Findings

The objectives of the agreement were to:

- improve competitiveness through an increase in productivity, more efficient use of capacity and working time, and greater occupational flexibility;
- establish a dialogue between the parties on a permanent basis through the extension of union participation and the establishment of a sector-level

committee to interpret the agreement and analyze and monitor developments in the sector;

- attain "compatibility" between workers' earnings and economic competitiveness; and
- maintain employment levels during restructuring.

The main features of the agreement included:

- a new dispute resolution process for resolving individual and collective disputes outside of the labour courts through new company-level joint committees and independent arbitrators
- increased flexibility in the reporting requirements for employers to the labour authority which reduced the time needed to make applications for the adjustment of employment to the labour authority
- a reduction in the number of occupational groups from five to three and replacement of 150 occupational categories with five broad grades
- enhancement of vertical and horizontal flexibility in assigning employees to work
- provision for the extension of plant operating time after consultation with workers' representatives with disputes to be settled by the new dispute resolution process
- extension of employee participation at board level in public enterprises by reduction of the threshold for union participation from 1,000 to 500 employees
- establishment of a new information and supervision committee
- a 4% wage increase (higher than had been proposed by government for public enterprises)

Conclusions

The report notes that the unions involved considered the agreement to be a response to the economic crisis that would establish a uniform framework for bargaining at the provincial- and company-level. It reported that the agreements had, however, provoked some internal disputes in the unions as some contend that the unions agreed to excessive concessions.

The employers are reported as having viewed the agreement as "an exercise in mutual trust". However, the private sector metalworking employers were concerned about some of its features.

17. SmithKline Beecham's Organizational Change in

FRANCE (EIRR 265, FEBRUARY 1996)

Focus

SmithKline Beecham embarked on a significant organizational change in its worldwide operations. In 1993 it started on a "cultural change" program aimed at continuous improvement with a focus on "employee empowerment". This report examines the experience at a manufacturing plant in Mayennne, France.

Background

This program followed earlier undertakings by SmithKline Beecham at this site in workforce flexibility, reductions in organizational hierarchy, introduction of quality circles, etc. This site also had a high quality union-management relationship characterized in the report as somewhat atypical in France. This was attributed by management to the practices of consultation and discussion at the plant and the continuity of union leadership.

Methodology

(Not specified)

Findings

The new "Industrial Master Plan" introduced for the period 1994-1997 had three main targets:

- production of strategic products with a 24-hour cycle time;
- implementation of a totally computerized system of production control; and
- obtaining the certificate of quality analysis with the end of batch processing.

The Plan was to be achieved through changes in five key areas: technologies and processes; industrial strategy; quality and prevention; IT and data processing; people and organization. The Plan recognized the changes in people and organization as the most challenging area of change.

The plans for organization and people included the establishment of agreements at the works council on flexible working cycles and job enrichment/career development.

By 1995 some of the achievements of the company included an increase in the level of workforce training. Interviews with workers revealed that:

- the employees were generally open and receptive to technological change;

- reduction in the levels of hierarchy was not regarded by the employees as having had a significant impact on their day-to-day working arrangements; and
- while team work had been implemented, employees still tended to look to management for solutions to problems.

Conclusions

The report on the SmithKline Beecham experience identified the following key success factors to successful change:

- a good initial union-management relationship;
- building on the experience of lesser, incremental change;
- having realistic management expectations; and
- supporting organizational change with a complementary changes in the employee relations area.

18. Zanussi Agreement on Employee Participation (EIRR 217, February 1992)

Focus

Zanussi, a subsidiary of Electrolux, and its unions signed a deal in October 1991 marking the first agreement on employee participation in a major Italian private sector company.

Background

Unlike many other European countries, in 1991 Italy did not have statutory provisions for employee participation through works councils or board-level representation. Collective agreements were the main source of information and consultation rights for Italian private sector unions.

Methodology

(Not specified)

Findings

Zanussi was Italy's second largest engineering group with about 15,000 workers in 1991. The three-year agreement on participation was signed between the company and its three unions, although one of these at first rejected the deal on the grounds that it would undermine collective bargaining without providing an alternative joint decision-making process.

The agreement provided for joint committees to meet with a number of functions - consultation, research, to express views prior to negotiations, etc. The committees could have either parity or an unequal number of representatives from either side. The committees could seek advice and information to assist

them in their duties. All members were to respect the confidentiality of company information.

Additionally, a range of specialist joint bodies could be established dealing with ecology and safety, technology, human resources, food services and facilities, etc.

Conclusions

The Zanussi agreement is important as it marked a movement of the unions away from their traditional confrontational approach to a more "participative" approach. Accordingly, it sparked significant debate within the union movement.

19. Teldec and IG Metall Flexibility Agreement (EIRR 232, May 1993)

Focus

A significant restructuring of Teldec required major enhancements in workplace flexibility. The employer and union negotiated new arrangements which met employee demands for improvements in training and the establishment of workplace joint committees to oversee changes in work design and advance notice to workers of significant changes.

Background

Teldec-Press was taken over by Warner Communications in 1988. Significant losses convinced the new management to undertake a radical reform and restructuring. It halted the production of vinyl recordings and concentrated in discs and cassettes. It also reduced staffing from 560 to 300 between 1988 and 1993, primarily through early retirements and without compulsory redundancies.

Teldec-Press management also sought to negotiate a more flexible agreement with its union, IG Metall, which was covered by a sectoral agreement. The union agreed to negotiations so long as conditions at the plant would be at least as good as under the sector agreement and the company would look at improvements in the shiftwork arrangements. The union also raised demands related to equal treatment for blue and white collar workers, training, improvements in work organization and design, and increased worker participation.

Methodology

(Not specified)

Findings

After a year of negotiations an agreement was reached with the following features:

- guarantees for training to promote employment security, enable workforce adaptation to changes in production processes and work organization, impart and/or improve social, economic, and ecological competence, and safeguard or improve technical proficiency;
- a replacement of the blue and white collar wage and salary grades with a simplified pay structure of 13 pay grades based on job requirements rather than occupational categories or job titles;
- a Framework Agreement on Job Design requiring work tasks and conditions should be organized such that demands are neither too low nor too excessive, with job enrichment and enlargement and group based organization; and
- a Participation Agreement requiring i) meetings for discussion of any matters relating to job design, work organization, health and safety, work load and staffing; and ii) notification of workers of any planned technical or organizational changes affecting their jobs.

Conclusions

One-and-a-half years following implementation the parties were still in a learning process. New training was still at an early stage. Fifty participation meetings had been held. Various committees had been established, but had not yet met.

Management attributed the slow start-up to the considerable demands implementation poses on managerial time and finding employees who want to get involved. Management felt that the works councilors needed additional training. According to the report, the greatest problem of implementation from management's point of view was trying to "instill into employees the opportunities that the new arrangements afforded them."

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